Public Health and Climate Change

California State Activities

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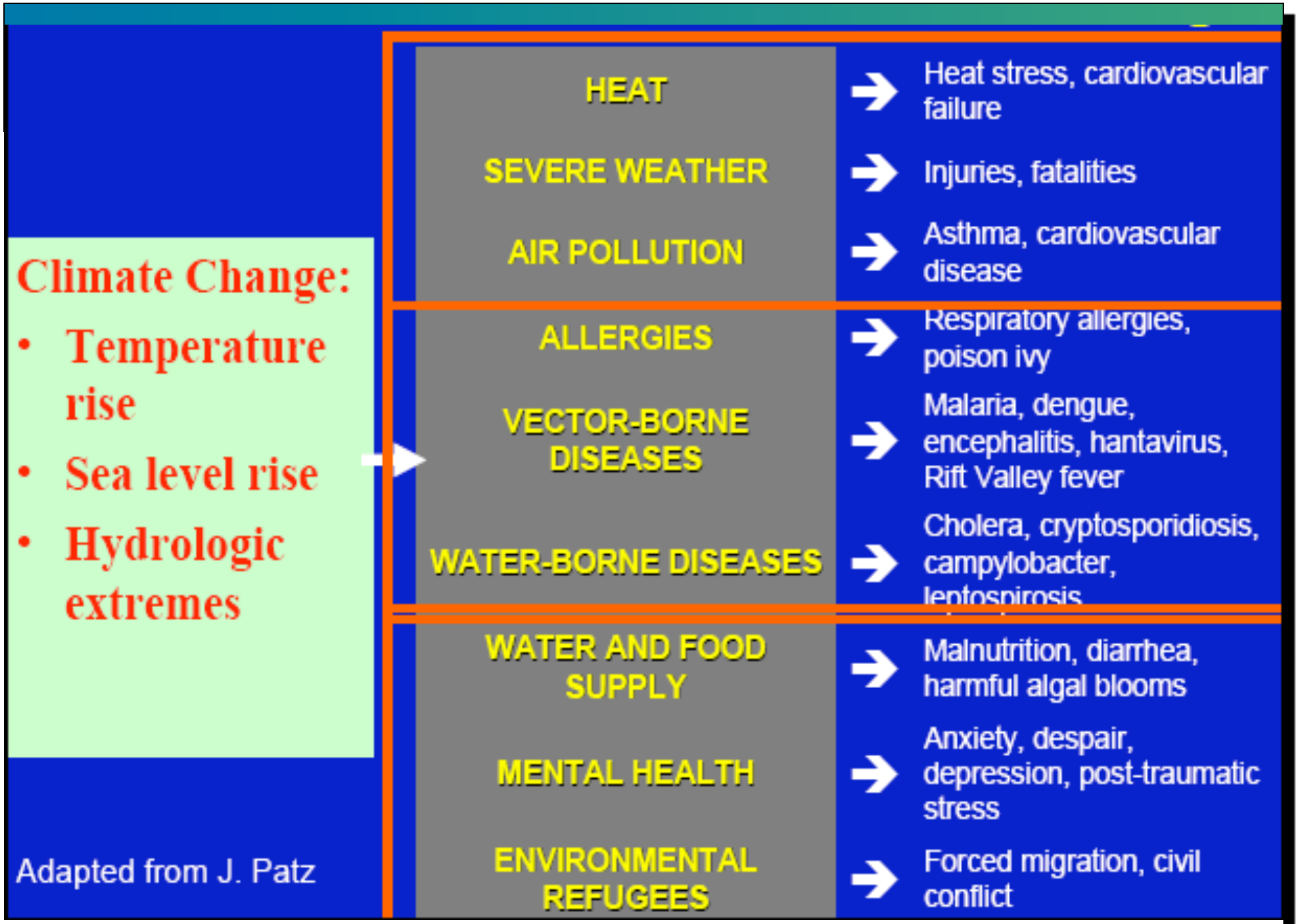
California Department of Public Health


Climate Change:
• Temperature rise
• Sea level rise
• Hydrologic extremes
HEAT
Heat stress, cardiovascular failure
SEVERE WEATHER
Injuries, fatalities
AIR POLLUTION
Asthma, cardiovascular disease
ALLERGIES
Respiratory allergies, poison ivy
VECTOR-BORNE DISEASES
Malaria, dengue, encephalitis, hantavirus, Rift Valley fever
WATER-BORNE DISEASES
Cholera, cryptosporidiosis, campylobacter, leptospirosis
WATER AND FOOD SUPPLY
Malnutrition, diarrhea, harmful algal blooms
MENTAL HEALTH
Anxiety, despair, depression, post-traumatic stress
ENVIRONMENTAL REFUGEES
Forced migration, civil conflict
Adapted from J. Patz

CAT PHWG Participants

- State agencies
  - CDPH, CARB, OEHHA, CalEPA, DPR, DOSH, CalFire, plus others
- Local health departments - CCLHO
- PH Advocates
  - American Lung Association
  - Public Health Law and Policy
  - Coalition for Clean Air
  - NRDC
- Private sector
  - Western States Petroleum Association, other

Evaluation of Strategies with PH Co-Benefits

- Guidelines for Health Impact Assessment
- Conduct HIA of Cap and Trade
  - Design to maximize PH benefits and minimize potential adverse consequences
- PHI/CDPH award from the RWJ Foundation/Pew Charitable Trust Health Impact Project

Health Impact Assessment Guidelines

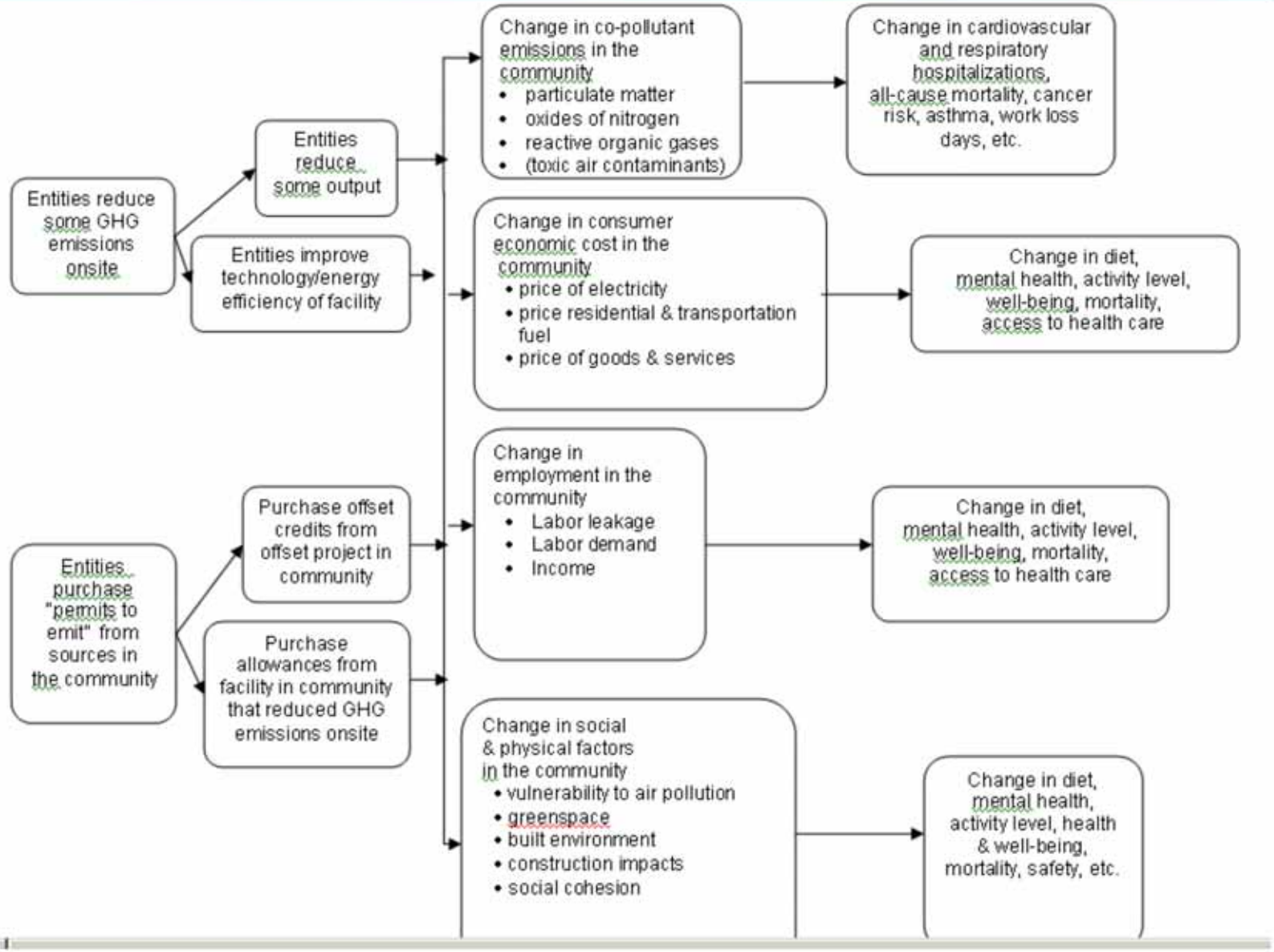
A Guide for Health Impact Assessment

Revised Working Draft

December, 2009

Rajiv Bhatia, MD, MPH
San Francisco Department of Public Health

Cap and Trade potential health impact pathways



Co-Benefits of Mitigation and Adaptation Strategies

- Reducing Urban Heat Islands
  - Cool roofs, cool paving, urban trees
- Urban trees also
  - Reduce electricity consumption (shading)
  - Improve air quality
    - Absorb polluting gases
    - Attach PM to leaves
  - Reduce ozone levels (with cooling)
  - Improve quality of life – reduce stress

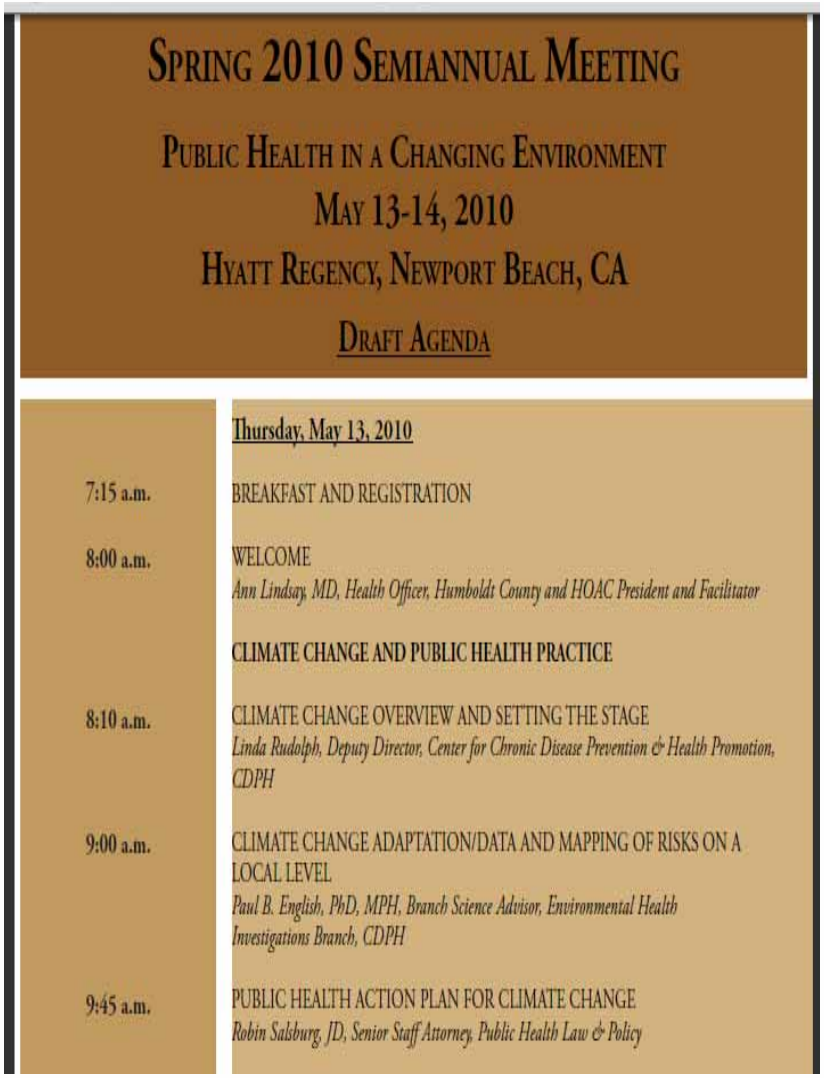
- Why is VMT a Health Indicator?
  - Safety – reduced auto injuries
  - Active transportation – increased physical activity
  - Improve air quality – reduce asthma/ CV disease
  - Decrease commute - increase social/civic time
  - Purchase power (food, health care) with lower transportation costs
  - Access to essential goods & services
  - Increase Social connections

Outreach, Training, TA

- Training and technical assistance for LHDs

Why is VMT a Health Indicator?

- **Safety** – reduced auto injuries
- **Active transportation** – increased physical activity
- Improve air quality – **reduce asthma/ CV disease**
- Decrease commute - increase **social/ civic** time
- Purchase power (**food, health care**) with lower transportation costs
- **Access** to essential goods & services
- Increase **Social connections**



SPRING 2010 SEMIANNUAL MEETING

PUBLIC HEALTH IN A CHANGING ENVIRONMENT

MAY 13-14, 2010

HYATT REGENCY, NEWPORT BEACH, CA

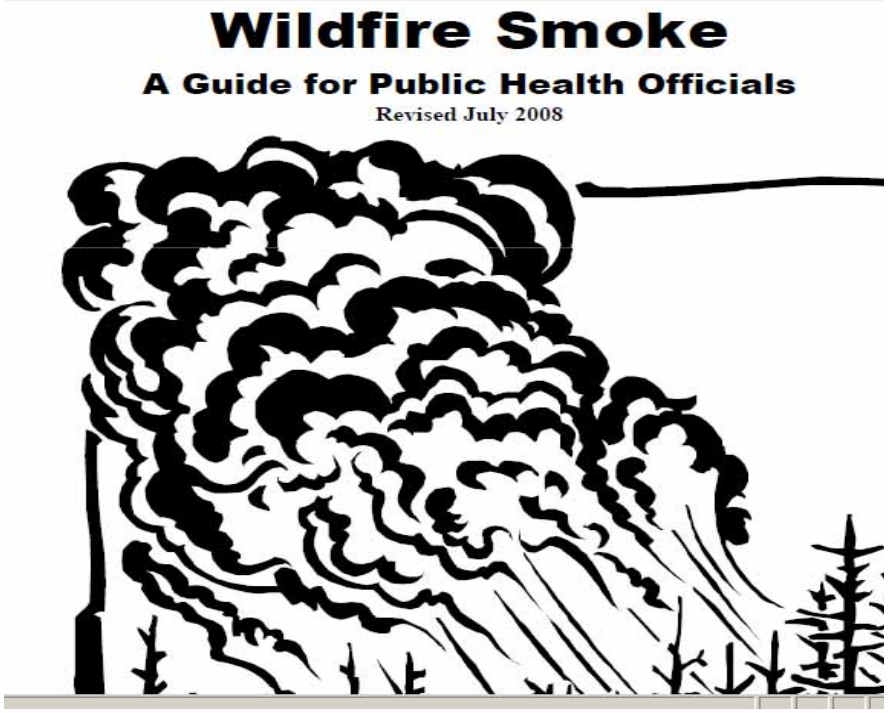
DRAFT AGENDA

Thursday, May 13, 2010

7:15 a.m.	BREAKFAST AND REGISTRATION
8:00 a.m.	WELCOME *Ann Lindsay, MD, Health Officer, Humboldt County and HOAC President and Facilitator*
	CLIMATE CHANGE AND PUBLIC HEALTH PRACTICE
8:10 a.m.	CLIMATE CHANGE OVERVIEW AND SETTING THE STAGE *Linda Rudolph, Deputy Director, Center for Chronic Disease Prevention & Health Promotion, CDPH*
9:00 a.m.	CLIMATE CHANGE ADAPTATION/DATA AND MAPPING OF RISKS ON A LOCAL LEVEL *Paul B. English, PhD, MPH, Branch Science Advisor, Environmental Health Investigations Branch, CDPH*
9:45 a.m.	PUBLIC HEALTH ACTION PLAN FOR CLIMATE CHANGE *Robin Salsburg, JD, Senior Staff Attorney, Public Health Law & Policy*

Improve PH Preparedness & Emergency Response

- Expand on existing plans for response to severe heat events
  - Develop a model heat preparedness program



Surveillance & Data Collection

- California Environmental Health Tracking program
- Vulnerability assessments*
  - Locally-scaled scenarios
  - Impacts on vulnerable populations
  - Risk and resilience factors
- Collaborate with CEC, academics, NGOs

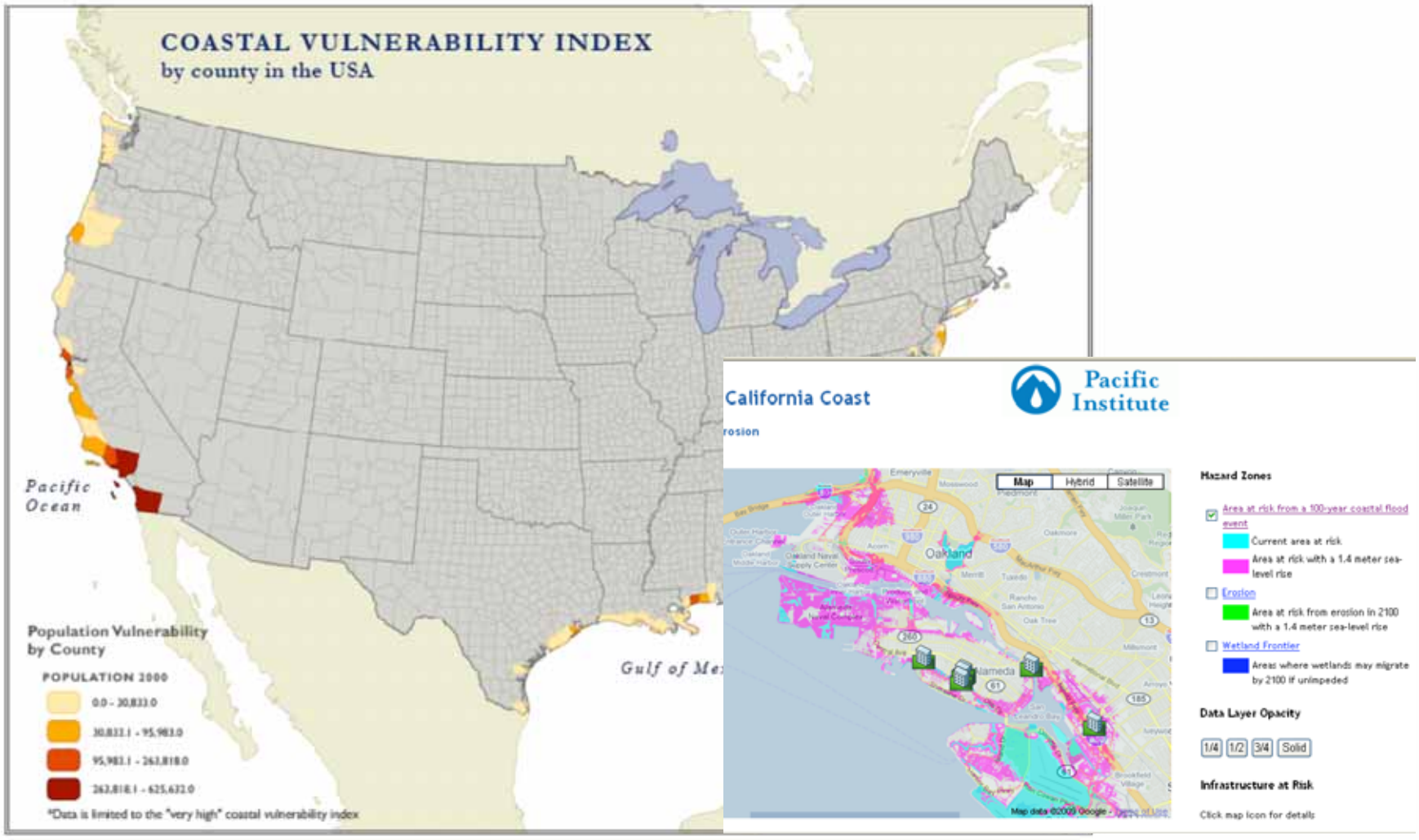
* Contingent on resources

Research and evaluation

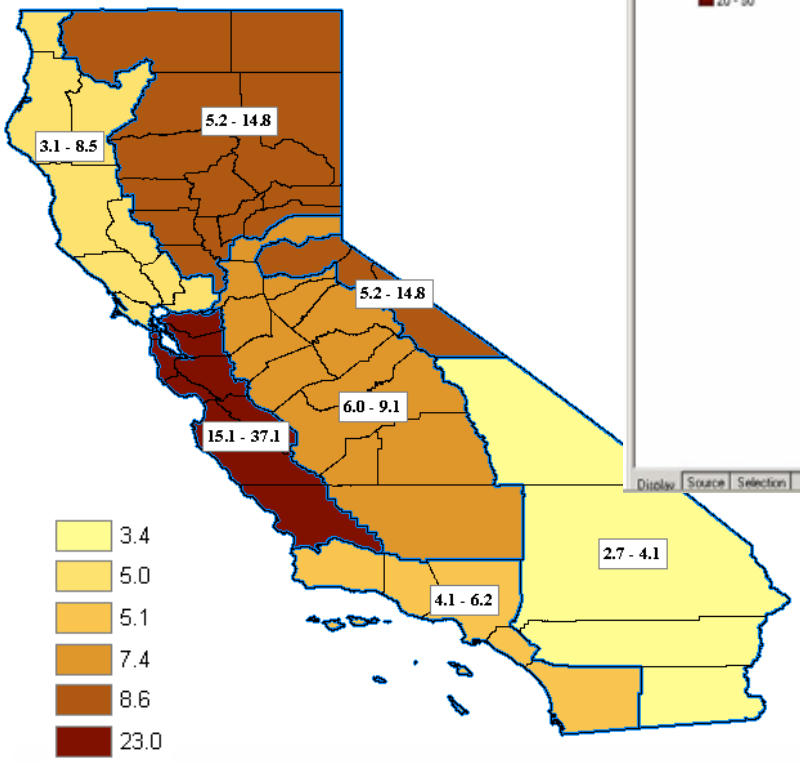
- Vulnerability assessments*
  - Locally-scaled scenarios
  - Impacts on vulnerable populations
  - Risk and resilience factors
- Collaborate with CEC, academics, NGOs

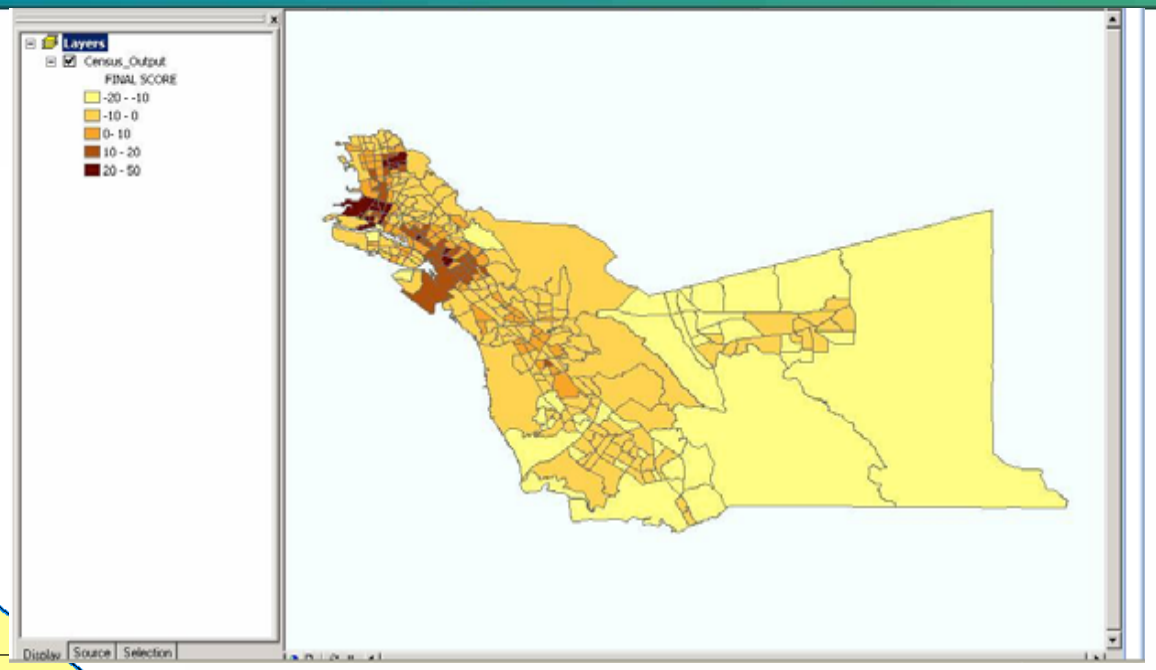
* Contingent on resources

Population and health infrastructure at risk for sea level rise



Heat – 2006 ER visits and Heat Vulnerability Index





Percent population below poverty level + percent households with elderly (65+) living alone (centered and summed)

Source: CDPH and NRDC

Promote community resilience to reduce vulnerability

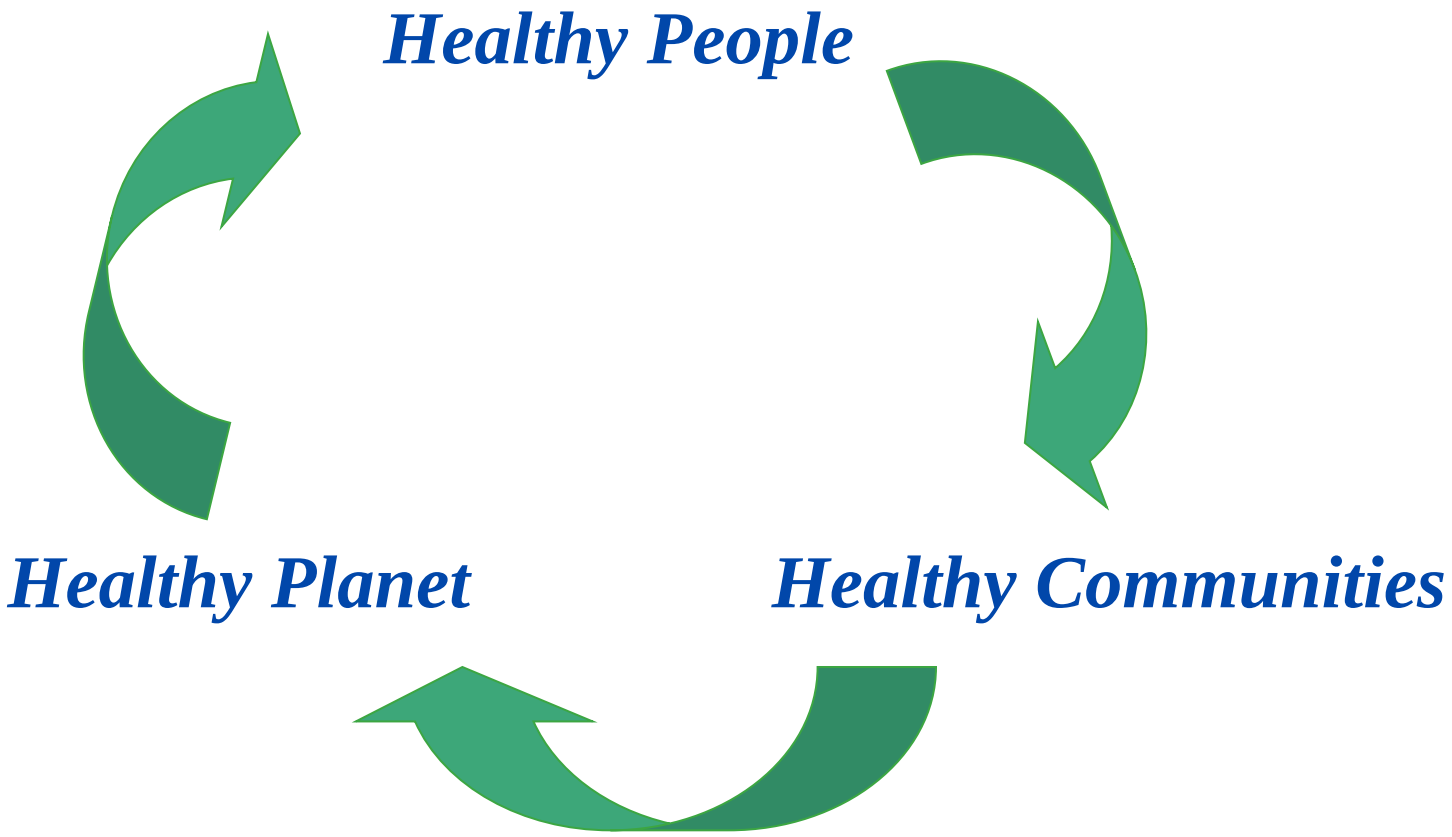
- Promote healthy built environments
  - Local Public Health and the Built Environment
  - HIA trainings
- Develop climate change communications tools
  - Promote awareness
  - Promote community engagement

= 10 lb. CO_2

+ CVD, obesity, cancer, stroke

= 1 lb. CO_2

Adaptd from: Center for Climate Change Communication


Healthy People
Healthy Communities
Healthy Planet